# **Jet Propulsion Laboratory**

#### INTEROFFICE MEMORANDUM

April 8, 2005

TO: J. C. Klose

**FROM:** E. S. Burke

**SUBJECT:** Minutes for the DSS-65 Downtime Readiness Review (DTRR) Part 2 for Antenna

Controller Replacement held April 6, 2005.

## **DSS-65 Downtime Readiness Review**

The DSS-65 Downtime Readiness Review (DTRR) Part 2 for Antenna Controller Replacement (ACR) was held on April 6, 2005 at JPL in Building 238-543 with Madrid staff participating to evaluate the readiness to begin the Antenna Controller Replacement (ACR) and Microwave Subsystem Controller (USC).

The board has unanimously approved the DSS-65 ACR installation.

### **Review Board**

DSN RAPSO Manager
DSMS Safety Engineer
Division 33 Representative to IND
Antenna Front End & Science Support Manager,
Office 923
ITT, O&M Contractor Engineering Manager
DSN Operations Manager
MDSCC Representative, Antenna Engineering
Board Secretary

### **Introduction** – G. Burke

The Downtime Readiness Review Board was introduced and the Process Definition was reviewed.

## **DSS-65 Downtime Overview** – S. Morgan

The DTRR will review and assess the readiness for all activities planned for the ACR task scheduled to occur between April 18, 2005 and July 29, 2005. At this time there are no major issues preventing the ACR task from taking place. This review does not address any remaining tasks to be completed during this downtime period as all other tasks associated with this downtime period were reviewed and approved during the DSS-65 DTRR on December 14, 2004.

### **Review Scope**

This review does not address any remaining tasks to be completed during this downtime period as all other tasks associated with this downtime period were reviewed and approved during the DSS-65 DTRR on December 14, 2004.

#### **Associated Tasks**

The Microwave Switch Controller (USC) is to be completed in parallel with the ACR installation, but is scheduled to take approximately 7 to 10 days with no impact to the ACR installation. All hardware and software are setup and ready to go for the USC task and it is expected that it may take less time to perform than expected. The USC task was reviewed and approved during a previous DTRR.

#### **Dependencies**

There are no dependencies at this time. The ACR software version 5.5.2 will be installed before ACR hardware installation begins.

#### **DTRR Summary**

It has been determined that the DSS-65 downtime task for ACR discussed have adequately been prepared and should proceed as planned. There are however some issues requiring completion prior to the ACR installation. These items are Antenna Relocation tasks that are on track for completion by April 18<sup>th:</sup>

- 1) Complete functional checkout of Mark IVA equipment to confirm that antenna control hardware and software is fully functional.
- 2) Schedule and complete a VLBI track to determine the exact location of the relocated antenna.
- 3) Complete the antenna and subreflector servo performance baseline measurements with the Mark IVA controllers.

Removal of Mark IVA hardware and installation of ACR hardware may proceed immediately after the required activities are completed.

#### **Board Summary**

The Board reviewed each of the success criteria following the presentation and taking under consideration the deviations it is recommended that DSS-65 begin its downtime as planned. Comments provided by each of the Board Members follow:

<u>Fred Battle</u> – Proceed with the downtime. He suggests that as part of the checkout of Mark IVA equipment that data from the accelerometers used during the antenna movement be reviewed for and possible spikes that cause concern.

<u>Paula Brown</u> – Proceed with the downtime. She reiterated that every effort to complete the relocation tasks stated above as scheduled should be made.

<u>Dennis Buck</u> – Proceed with the downtime. Mr. Buck thanked the scheduling team for accommodating the extension that gave the installation enough time to complete the task, and asked that Peter Van Sickler be cognizant of the status of the tasks stated above.

<u>Peter Van Sickler</u> – Proceed with the downtime. Concerned that the commitment of manpower made by the station to fulfill the 5 day per week schedule may be too taxing to the station

<u>Jim Buckley</u> – Proceed with the downtime. All criteria has been met and in line with requirements.

<u>Pablo Perez-Zapardiel</u> – Not available for comment. No concerns had been voiced prior to the review.

<u>Gene Burke</u> – Proceed with the downtime. The task seems to be covered well by the team, and is confident that there is enough time to complete all work.

#### cc:

- A. Bhanji
- F. Battle
- J. Berner
- P. Brown
- D. Buck
- J. Buckley
- M. Coluzzi
- J. Hodder
- J. Patterson
- P. Perez-Zapardiel
- R. Sible
- G. Spradlin
- P. Van Sickler